APPENDIX FS-F

Groundwater Tidal Evaluation by LFR and H2OGEOL, Bioremediation Field Tests

Table 1
Groundwater Monitoring Well Survey Data
Mandalay Bay
002-10226-00-002

Well	Predicted Tides[1]				Measured Survey Data[2]		Comparison of Predicted Tides and Measured Survey Data[3]	
	Date	Time	High (ft. MSL)	Low (ft.MSL)	Measured Groundwater Elevation[4] (ft. MSL)	Change in Measured High and Low Tide Groundwater Elevations[5] (feet)	Estimated Change in Groundwater Elevation[6] (feet)	Estimated Tidal Lag Response Time[7] (Hours)
MW-1	04/09/04	14:09	+ 3.1	--	3.53	--	0.00	--
(15-21)	04/09/04	18:05	--	+ 2.3	3.53	--	0.00	--
	04/10/04	0:45	+ 5.4	--	3.53	--	0.00	--
	04/10/04	8:45	--	- 0.3	3.52	--	0.01	--
	04/10/04	16:22	+ 3.0	--	3.52	--	0.01	--
	04/10/04	19:04	--	+ 2.8	3.52	--	0.01	--
	04/11/04	1:57	+ 5.0	--	3.52	--	0.01	--
	04/11/04	10:16	--	- 0.3	3.52	--	0.01	--
	04/11/04	18:09	+ 3.4	--	3.51	--	0.02	--
	04/11/04	21:28	--	+ 3.1	3.51	--	0.02	--
	04/12/04	3:36	+ 4.8	--	3.50	--	0.03	--
	04/12/04	11:34	--	- 0.4	3.50	--	0.03	--
	04/12/04	18:56	+ 3.8	--	3.49	--	0.04	--
	04/12/04	23:30	--	+ 2.7	3.49	--	0.04	--
	04/13/04	5:11	+ 4.8	--	3.49	--	0.04	--
	04/13/04	12:33	--	- 0.5	3.49	--	0.04	--
	04/13/04	19:27	+ 4.2	--	3.48	--	0.05	--
	04/14/04	0:41	--	+ 2.1	3.48	--	0.05	--
	04/14/04	6:24	+ 4.9	--	3.48	--	0.05	--
	Average				3.51	--	0.02	--
	Approximate Distance of Well MW-1 to Pacific Ocean (feet)							1,800
	Approximate Distance of Well MW-1 to Mandalay Canal (feet)							1,300
MW-2	04/09/04	14:09	+ 3.1	--	2.90	0.01	0.20	0.40
(55-70)	04/09/04	18:05	--	+ 2.3	2.89	0.61	0.59	0.40
	04/10/04	0:45	+ 5.4	--	3.50	1.01	1.90	0.50
	04/10/04	8:45	--	- 0.3	2.49	0.51	2.79	0.50
	04/10/04	16:22	+ 3.0	--	3.00	0.08	0.00	0.30
	04/10/04	19:04	--	+ 2.8	2.92	0.49	0.12	0.50
	04/11/04	1:57	+ 5.0	--	3.41	0.91	1.59	0.30
	04/11/04	10:16	--	- 0.3	2.50	0.62	2.80	0.50
	04/11/04	18:09	+ 3.4	--	3.12	0.02	0.28	0.30
	04/11/04	21:28	--	+ 3.1	3.10	0.30	0.00	0.30
	04/12/04	3:36	+ 4.8	--	3.40	0.91	1.40	0.30
	04/12/04	11:34	--	- 0.4	2.49	0.61	2.89	0.20
	04/12/04	18:56	+ 3.8	--	3.10	0.15	0.70	0.40
	04/12/04	23:30	--	+ 2.7	2.95	0.43	0.25	0.30
	04/13/04	5:11	+ 4.8	--	3.38	0.93	1.42	0.70

Table 1
Groundwater Monitoring Well Survey Data
Mandalay Bay
002-10226-00-002

Well	Predicted Tides[1]				Measured Survey Data[2]		Comparison of Predicted Tides and Measured Survey Data[3]	
	Date	Time	High (ft. MSL)	Low (ft.MSL)	Measured Groundwater Elevation[4] (ft. MSL)	Change in Measured High and Low Tide Groundwater Elevations[5] (feet)	Estimated Change in Groundwater Elevation[6] (feet)	Estimated Tidal Lag Response Time[7] (Hours)
MW-2	04/13/04	12:33	--	- 0.5	2.45	0.70	2.95	0.50
	04/13/04	19:27	+ 4.2	--	3.15	0.35	1.05	0.20
	04/14/04	0:41	--	+ 2.1	2.80	0.55	0.70	0.70
	04/14/04	6:24	+ 4.9	--	3.35	--	1.55	0.80
	Average				3.02	0.51	1.22	0.43
	Approximate Distance of Well MW-1 to Pacific Ocean (feet)							1,800
	Approximate Distance of Well MW-2 to Mandalay Canal (feet)							1,300
MW-12	04/04/04	15:29	--	- 0.1	--	--	--	--
(20-35)	04/04/04	21:40	+ 5.4	--	2.19	1.90	3.21	0.40
	04/05/04	3:24	--	- 0.2	0.29	1.68	0.49	0.50
	04/05/04	10:01	+ 5.0	--	1.97	1.61	3.03	0.40
	04/05/04	15:57	--	+ 0.3	0.36	2.06	0.06	0.40
	04/05/04	22:07	+ 5.7	--	2.42	2.16	3.28	0.40
	04/06/04	4:37	--	- 0.5	0.26	1.53	0.76	0.40
	04/06/04	10:47	+ 4.6	--	1.79	1.27	2.81	0.20
	04/06/04	16:26	--	- 0.7	0.52	2.08	1.22	0.20
	04/06/04	22:38	+ 5.9	--	2.60	2.35	3.30	0.30
	04/07/04	5:24	--	- 0.7	0.25	1.34	0.95	0.10
	04/07/04	11:39	+ 4.1	--	1.59	0.87	2.51	0.10
	04/07/04	16:56	--	+ 1.3	0.72	2.02	0.58	0.20
	04/07/04	23:13	+ 5.9	--	2.74	2.49	3.16	0.10
	04/08/04	6:18	--	- 0.6	0.25	1.17	0.85	0.60
	04/08/04	12:42	+ 3.5	--	1.42	0.51	2.08	0.30
	04/08/04	17:28	--	+ 1.8	0.91	1.82	0.89	0.20
	04/08/04	23:54	+ 5.7	--	2.73	2.51	2.97	0.10
	04/09/04	7:24	--	- 0.5	0.22	--	0.72	0.40
	Average				1.38	1.73	1.83	0.29
	Approximate Distance of Well MW-12 to Pacific Ocean (feet)							3,250
	Approximate Distance of Well MW-12 to Mandalay Canal (feet)							62

Table 1
Groundwater Monitoring Well Survey Data
Mandalay Bay
002-10226-00-002

Well	Predicted Tides[1]				Measured Survey Data[2]		Comparison of Predicted Tides and Measured Survey Data[3]	
	Date	Time	High (ft. MSL)	Low (ft.MSL)	Measured Groundwater Elevation[4] (ft. MSL)	Change in Measured High and Low Tide Groundwater Elevations[5] (feet)	Estimated Change in Groundwater Elevation[6] (feet)	Estimated Tidal Lag Response Time[7] (Hours)
MW-13	04/16/04	14:27	--	- 0.2	2.91	0.97	3.11	2.00
(20-35)	04/16/04	20:47	+ 5.2	--	3.88	0.83	1.32	1.80
	04/17/04	2:53	--	+ 0.4	3.05	0.78	2.65	2.00
	04/17/04	8:52	+ 4.8	--	3.83	0.76	0.97	2.10
	04/17/04	14:55	--	+ 0.2	3.07	0.83	2.87	2.00
	04/17/04	21:10	+ 5.4	--	3.90	0.98	1.50	2.10
	04/18/04	3:29	--	0.0	2.92	0.76	2.92	2.20
	04/18/04	9:31	+ 4.8	--	3.68	0.68	1.12	2.10
	04/18/04	15:20	--	+ 0.5	3.00	0.95	2.50	2.00
	04/18/04	21:32	+ 5.5	--	3.95	1.04	1.55	1.90
	04/19/04	4:03	--	- 0.2	2.91	--	3.11	2.20
	Average				3.37	0.86	2.15	2.04
	Approximate Distance of Well MW-13 to Pacific Ocean (feet)							2,562
	Approximate Distance of Well MW-13 to Mandalay Canal (feet)							662
MW-16	04/04/04	15:29	--	- 0.1	--	--	--	--
(55-70)	04/04/04	21:40	+ 5.4	--	2.77	3.04	2.63	0.10
	04/05/04	3:24	--	- 0.2	-0.27	2.83	0.07	0.20
	04/05/04	10:01	+ 5.0	--	2.56	2.66	2.44	0.30
	04/05/04	15:57	--	+ 0.3	-0.10	3.21	0.40	0.20
	04/05/04	22:07	+ 5.7	--	3.11	3.50	2.59	0.20
	04/06/04	4:37	--	- 0.5	-0.39	2.61	0.11	0.30
	04/06/04	10:47	+ 4.6	--	2.22	2.02	2.38	0.10
	04/06/04	16:26	--	- 0.7	0.20	3.21	0.90	0.30
	04/06/04	22:38	+ 5.9	--	3.41	3.69	2.49	0.40
	04/07/04	5:24	--	- 0.7	-0.28	2.36	0.42	0.10
	04/07/04	11:39	+ 4.1	--	2.08	1.52	2.02	0.10
	04/07/04	16:56	--	+ 1.3	0.56	2.97	0.74	0.30
	04/07/04	23:13	+ 5.9	--	3.53	3.75	2.37	0.20
	04/08/04	6:18	--	- 0.6	-0.22	2.02	0.38	0.40
	04/08/04	12:42	+ 3.5	--	1.80	0.90	1.70	0.40
	04/08/04	17:28	--	+ 1.8	0.90	2.66	0.90	0.40
	04/08/04	23:54	+ 5.7	--	3.56	3.77	2.14	0.30
	04/09/04	7:24	--	- 0.5	-0.21	--	0.29	0.90
	Average				1.40	2.75	1.39	0.29
	Approximate Distance of Well MW-16 to Pacific Ocean (feet)							3,212
	Aprroximate Distance of Well MW-16 to Mandalay Canal (feet)							62

Table 1
Groundwater Monitoring Well Survey Data
Mandalay Bay
002-10226-00-002

Well	Predicted Tides[1]				Measured Survey Data[2]		Comparison of Predicted Tides and Measured Survey Data[3]	
	Date	Time	High (ft. MSL)	Low (ft.MSL)	Measured Groundwater Elevation[4] (ft. MSL)	Change in Measured High and Low Tide Groundwater Elevations[5] (feet)	Estimated Change in Groundwater Elevation[6] (feet)	Estimated Tidal Lag Response Time[7] (Hours)
MW-17	04/16/04	14:27	--	- 0.2	2.18	0.56	2.38	2.10
	04/16/04	20:47	+ 5.2	--	2.74	0.49	2.46	2.00
	04/17/04	2:53	--	+ 0.4	2.25	0.46	1.85	2.10
	04/17/04	8:52	+ 4.8	--	2.71	0.49	2.09	2.20
	04/17/04	14:55	--	+ 0.2	2.22	0.61	2.02	2.30
	04/17/04	21:10	+ 5.4	--	2.83	0.63	2.57	2.30
	04/18/04	3:29	--	0.0	2.20	0.44	2.20	2.90
	04/18/04	9:31	+ 4.8	--	2.64	0.38	2.16	2.70
	04/18/04	15:20	--	+ 0.5	2.26	0.54	1.76	2.60
	04/18/04	21:32	+ 5.5	--	2.80	0.58	2.70	2.80
	04/19/04	4:03	--	- 0.2	2.22	--	2.42	2.60
	Average				2.46	0.52	2.24	2.42
	Approximate Distance of Well MW-17 to Pacific Ocean (feet)							2,487
	Approximate Distance of Well MW-17 to Mandalay Canal (feet)							925

Notes:

MSL Mean Sea Level
-- Data not applicable or not available
55 - 70 Well screen interval

1 Predicted high and low tides from Ventura Star Newspaper

2 Groundwater elevation data measured in wells with pressure transducer and interpreted from plotted data presented on figures 2, 3 and 4.

3 Comparison of predicted high and low tidal data to measured tidal influence measured in wells for this study.

4 Measured groundwater elevation information interpreted from plotted data presented on figures 2, 3, and 4.

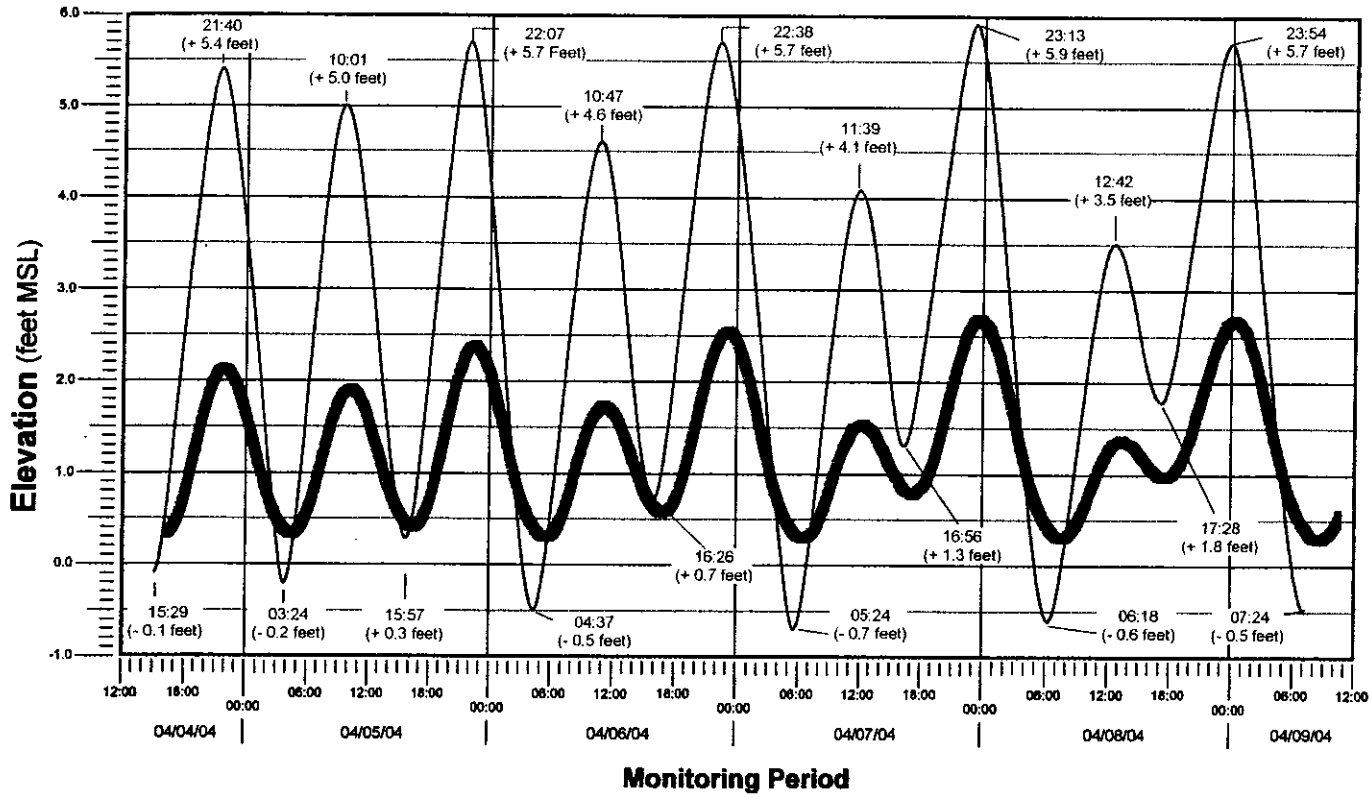
5 Estimated difference between high and low tide data from interpreted from figures 2, 3, and 4.

6 Estimated difference between corresponding predicted high and low tidal data from measured data from figures 2, 3, and 4.

7 Estimated tidal lag between predicted high and low tidal influence to measured tidal influence as interpreted in figures 2, 3, and 4.

Well #	Average GW Elevation Change	Average Lag Response Time
MW-1	0.02	--
MW-2	1.22	0.43
MW-12	1.83	0.29
MW-13	2.15	2.04
MW-16	1.39	0.29
MW-17	2.24	2.42

MW-12

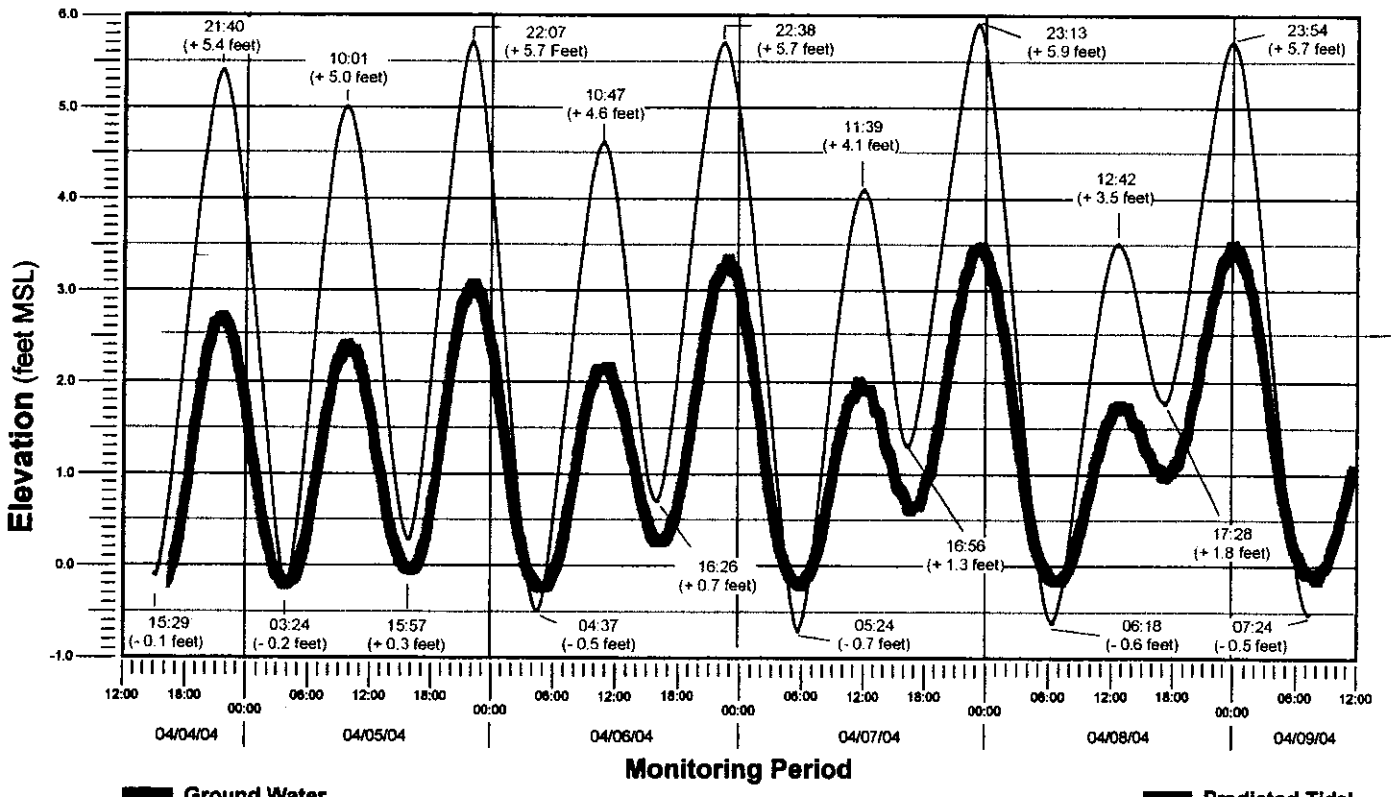


Ground Water Elevation Results

10:47 (+ 4.6 feet) **Time of High/Low Tide (Predicted Tide Elevation MSL)**

Predicted Tidal Elevation

MW-16

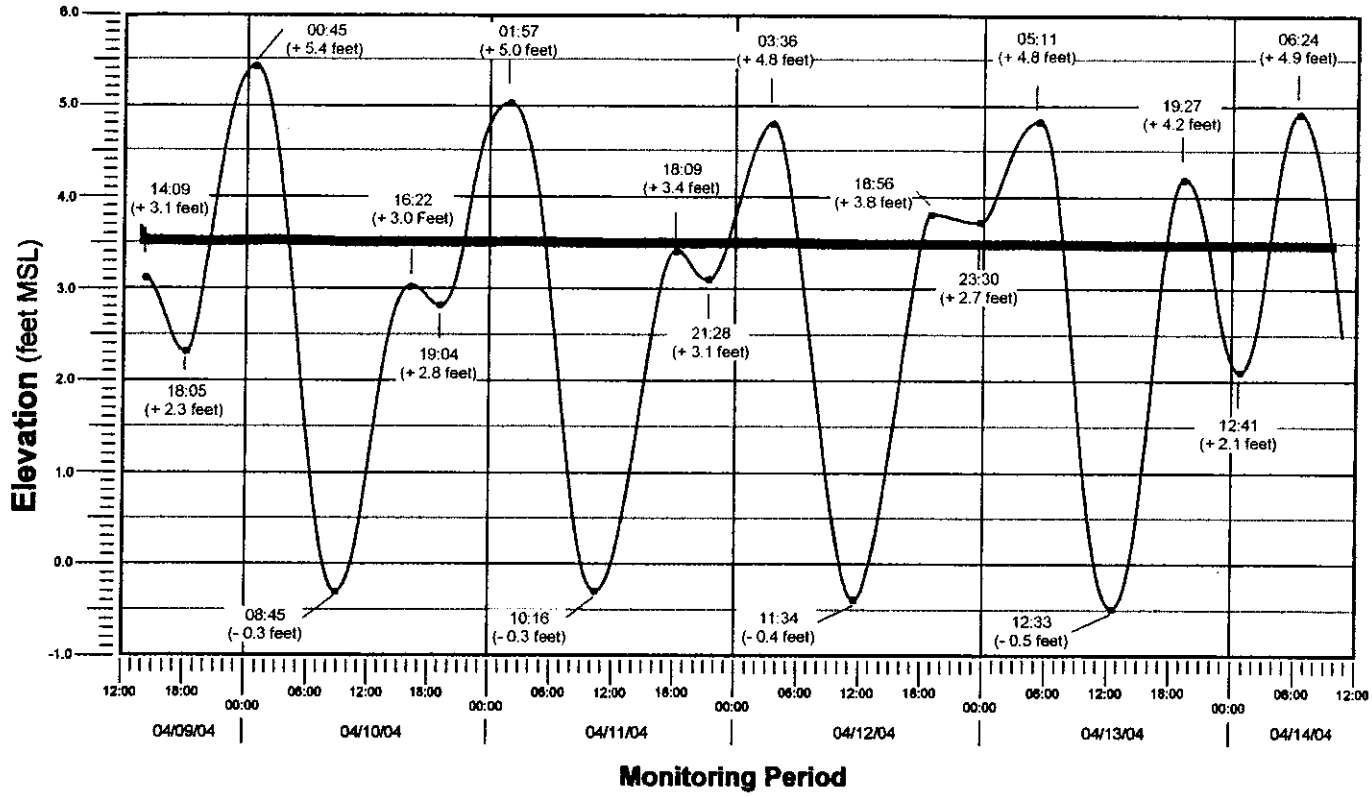


Ground Water Elevation Results

10:47 (+ 4.6 feet) **Time of High/Low Tide (Predicted Tide Elevation MSL)**

Predicted Tidal Elevation

MW-1

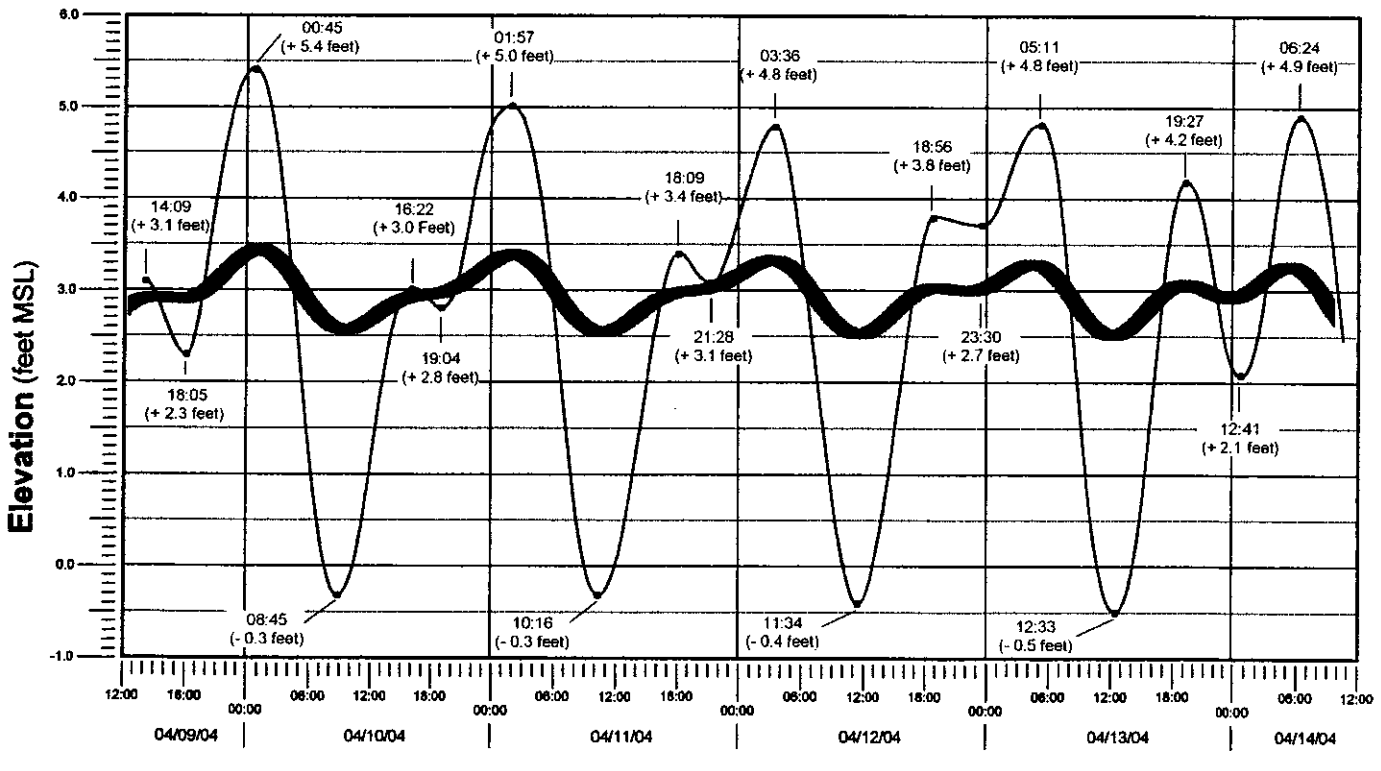


Ground Water Elevation Results

19:04 (+ 2.8 feet) Time of High/Low Tide (Predicted Tide Elevation MSL)

Predicted Tidal Elevation

MW-2

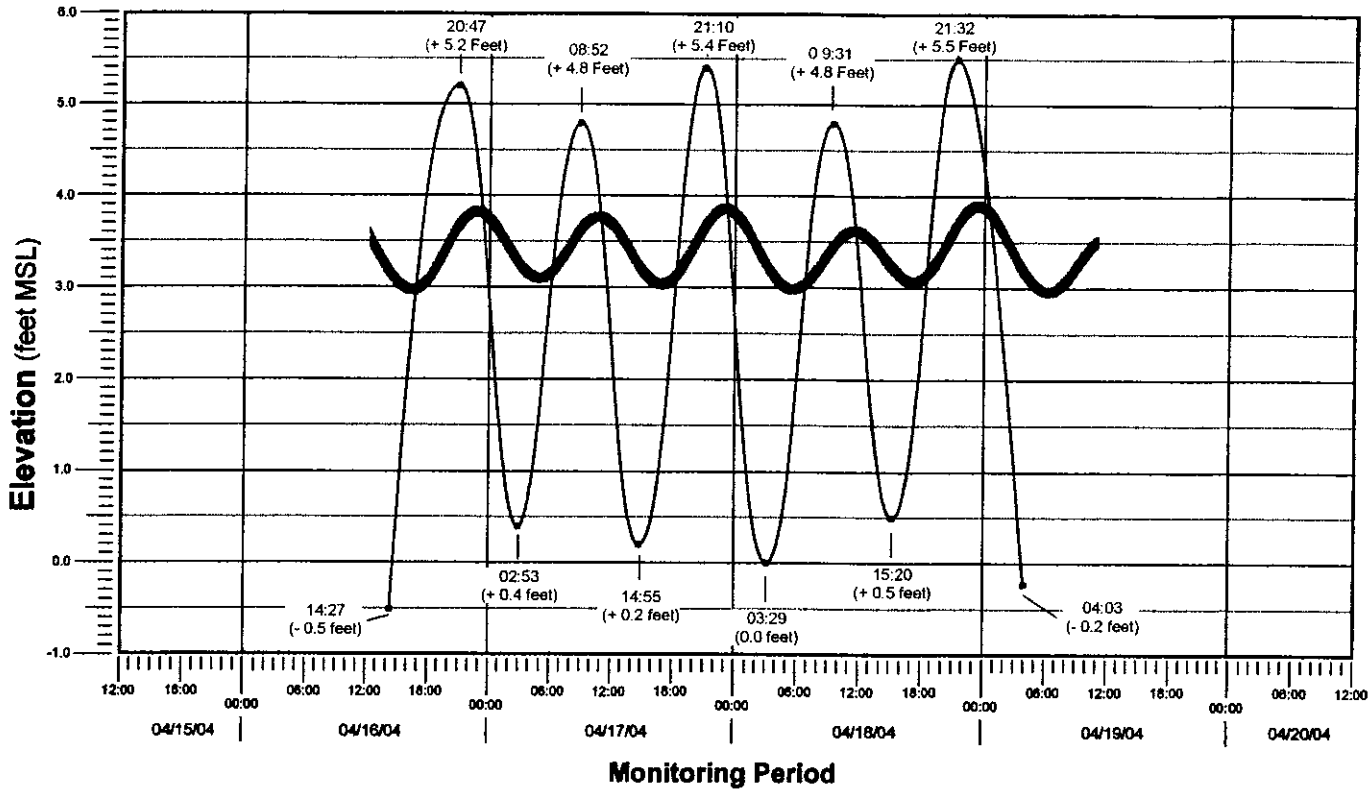


Ground Water Elevation Results

19:04 (+ 2.8 feet) Time of High/Low Tide (Predicted Tide Elevation MSL)

Predicted Tidal Elevation

MW-13

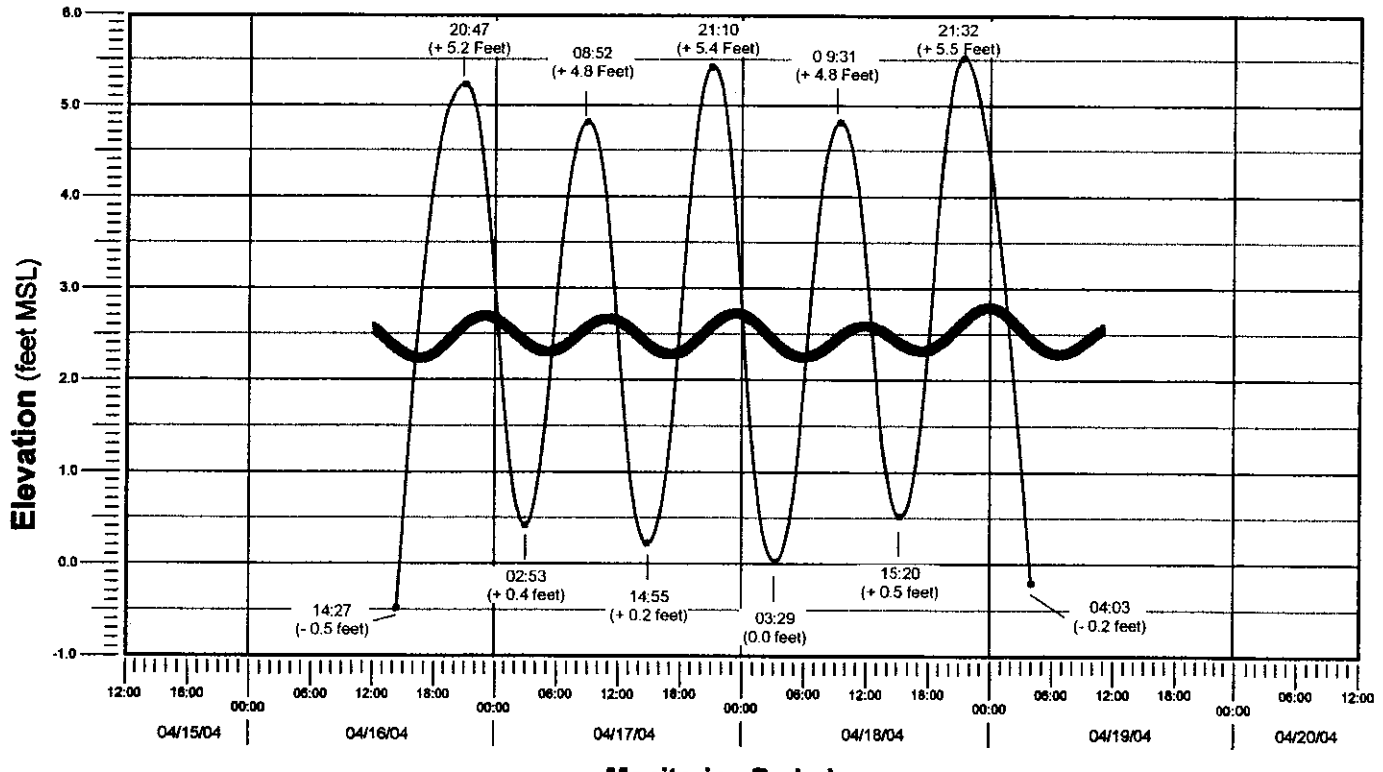


Ground Water Elevation Results

21:10 (+ 5.4 Feet) Time of High Tide (predicted tide above MSL)

Predicted Tidal Elevation

MW-17



Ground Water Elevation Results

21:10 (+ 5.4 Feet) Time of High Tide (predicted tide above MSL)

Predicted Tidal Elevation

H2OGEOL

A GROUND WATER CONSULTANCY

California Regional Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, California 90013-2343

November 15, 2001

Attn: Technical Support Unit, Compliance File No.CI-8215

Mr. Peter J. Raftery, Associate Engineeing Geologist
Ms. Blythe Ponek-Bacharowski, Chief, Site Cleanup Unit II

Subject: Tide Monitoring Report
North Shore At Mandalay Bay Site - Northeast Corner Of West 5th Street And Harbor Boulevard, Oxnard, California
File No. 98-197 - SLIC No. 457

Dear Mr. Raftery and Ms. Ponek-Bacharowski:

This Tide Monitoring Report is submitted by H_2OGEOL on behalf of North Shore At Mandalay Bay for their property located at the northeast quadrant of the intersection of Harbor Boulevard and West 5th Street in unincorporated Ventura County, California. The site location is shown on Figure 1. The tide monitoring occurred on September 18-19, 2001 and was followed by the Third Quarter, 2001 groundwater monitoring event on September 19, 2001. The Third Quarter, 2001 Groundwater Monitoring Report was submitted on October

1.0 Initial Potentiometric Surface

Depth to water in each monitoring well was measured to +/- 0.01 feet using a Solinst Model water level meter between 09:40 and 11:08 on September 18, 2001. The depths to water were converted to potentiometric surface elevation by subtracting the measured depths to water from the casing top elevations provided in the May, 2001 well survey by Penfield & Smith. The depth to water, casing top elevations, and potentiometric surface elevations are presented in Table 1.

Table 1 also summarizes the known well construction information: well casing diameter, total well column depth, and screen interval. The depth and screen interval information is summarized graphically in Figure 2 allowing ready comparison of well configurations.

Three total well depth and well screen intervals are represented at the site. Monitoring wells MW-6, MW-8, MW-9, and MW-10 were completed with a bottom of well elevation above mean sea level. During the Third Quarter monitoring the yield from

Paired hydrostratigraphic interval monitoring wells MW-1 and MW-2 on the west side of the property along Harbor Boulevard were fitted with submersible pressure transducers powered by, and the return signal recorded by the same electronic data logger. Monitoring well MW-4 on the east side of the property, nearest the Edison/Mandalay Canal, was fitted with a submersible pressure transducer powered by, and the return signal recorded by a separate electronic data logger. The west bank slope of the Edison/Mandalay Canal channel cross section did not lend itself to affixing a submersible pressure transducer in this tidally influenced surface water feature as had been planned.

The water levels (depth to water below a fixed point) in the Edison/Mandalay Canal were periodically hand measured at the south side of the West Fifth Street Bridge. Water levels were also periodically measured in monitoring wells MW-3, MW-7, and MW-8 and in instrumented monitoring wells MW-1, MW-2, and MW-4.

All water levels were converted to water surface elevation based on reference elevations provided in the surveys by Penfield & Smith. All of the measured water levels are graphically portrayed as hydrographs in Figure 4. The tidally controlled water levels in the Edison/Mandalay Canal are plotted with the published predicted tide at Port Hueneme, the ocean connection of the Edison/Mandalay Canal, in the uppermost graph of Figure 4. The correspondence of the measured water levels with the predicted tide indicates that there is no discernable difference between the predicted tide and the observed tidal response in the canal.

Monitoring wells MW-1, MW-3, MW-7, and MW-8 did not show a water level response during tidal monitoring (Figure 4). Shallow monitoring well MW-4 and deep monitoring well MW-2 showed a water level response in relation to tidal action. The tide response relationships of these two wells are graphically shown in Figure 5. The lag time between the near midnight high tide in the Edison/Mandalay Canal and the highest recorded water surface elevation in each of these monitoring wells is shown. The average water surface elevation in the Edison/Mandalay Canal during the monitored interval and the average potentiometric surface elevation in each well is also shown.

The tidal response in monitoring well MW-2, screened from 54 to 69 feet beneath ground surface, may be a pressure response from the oceanic tides. Mandlay Beach is some 1,700 feet to the west.

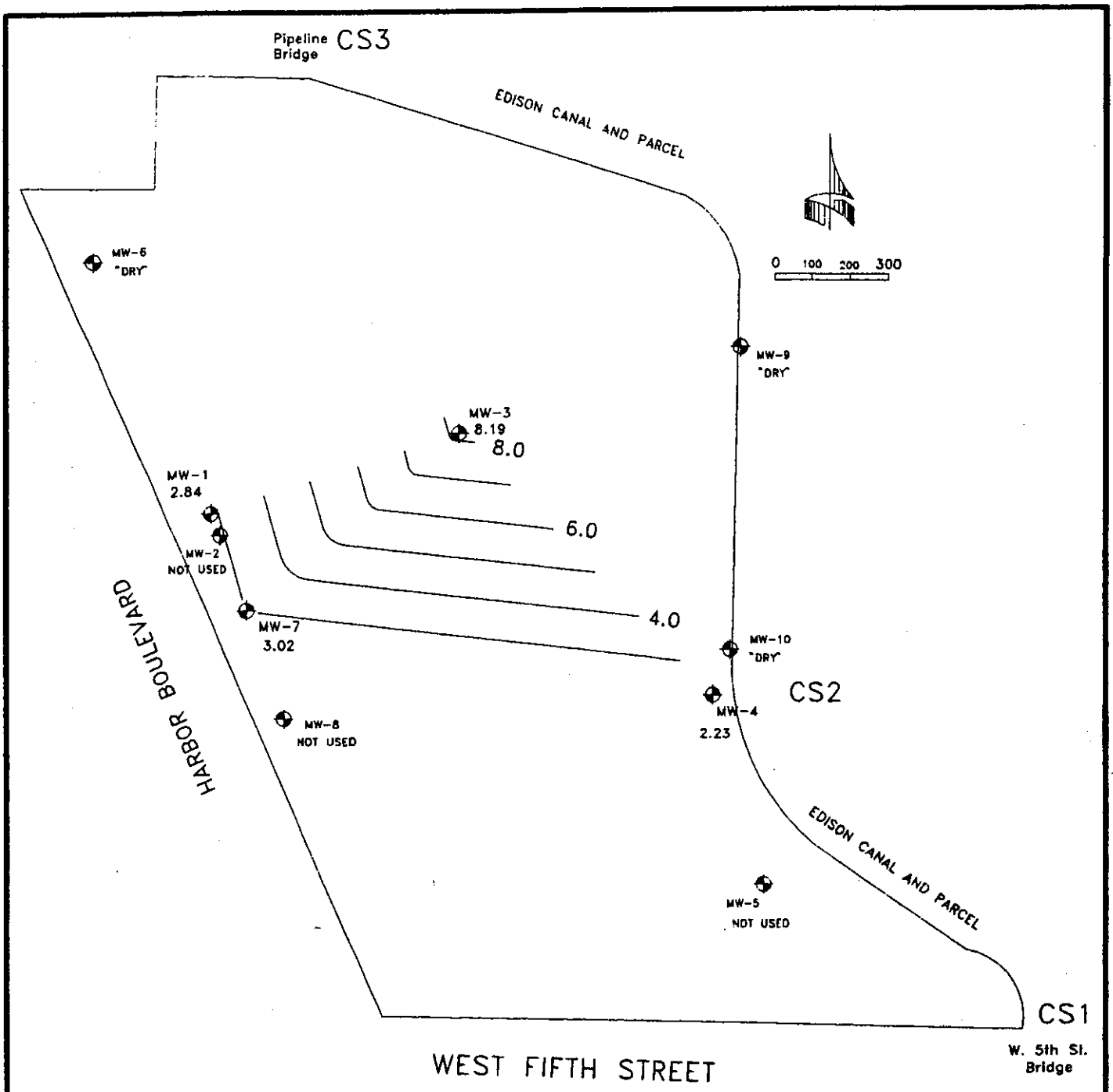
Monitoring well MW-4 clearly shows a tidal response to the tidal action in the Edison/Mandalay Canal. The groundwater tidal response is, however, completely dampened over this distance between the canal and monitoring well MW-3, which showed no tidal response.

TABLE 1
WATER LEVEL MEASUREMENTS
SEPTEMBER 18, 2001
NORTH SHORE AT MANDAYA BAY
VENTURA COUNTY, CALIFORNIA

WELL	Diameter inches	TOTAL WELL DEPTH feet below casing top	SCREEN INTERVAL feet below surface	TIME	DEPTH TO WATER feet below casing top	CASING ELEVATION feet above mean sea level	GROUNDWATER ELEVATION feet above mean sea level
MW-1	4	26.72	15-25	10:21	19.55	22.39	2.84
MW-2	4	71.27	54-69	10:23	19.04	22.26	3.22
MW-3	4	36.78	13.5-35	09:40	22.20	30.39	8.19
MW-4	4	36.44	14.5-35	09:46	28.37	30.60	2.23
MW-5	10.5	260	180-260	------	------	14.89	------
MW-6	4	17.64	------	10:30	"DRY"	20.40	2.61
MW-7	2	31.11	------	11:05	18.11	21.13	3.02
MW-8	4	13.52	------	11:08	11.92	15.14	3.22
MW-9	4	19.02	------	09:50	"DRY"	30.83	<12.05
MW-10	4	19.80	------	10:00	"DRY"	31.53	<11.50

TABLE 2
POTENTIOMETRIC SURFACE GRADIENT AND DIRECTION
SEPTEMBER 18, 2001
NORTH SHORE AT MANDAYA BAY
VENTURA COUNTY, CALIFORNIA

Triangle	Well Traingle			Gradient Ft./Ft.	Bearing °S = 270	Direction		
1	MW-1	MW-3	MW-4	0.01316	251.74	S	18.26	°W
2	MW-3	MW-4	MW-7	0.00968	263.12	S	6.88	°W
		AVERAGE		0.01142	257.43	S	12.57	°W



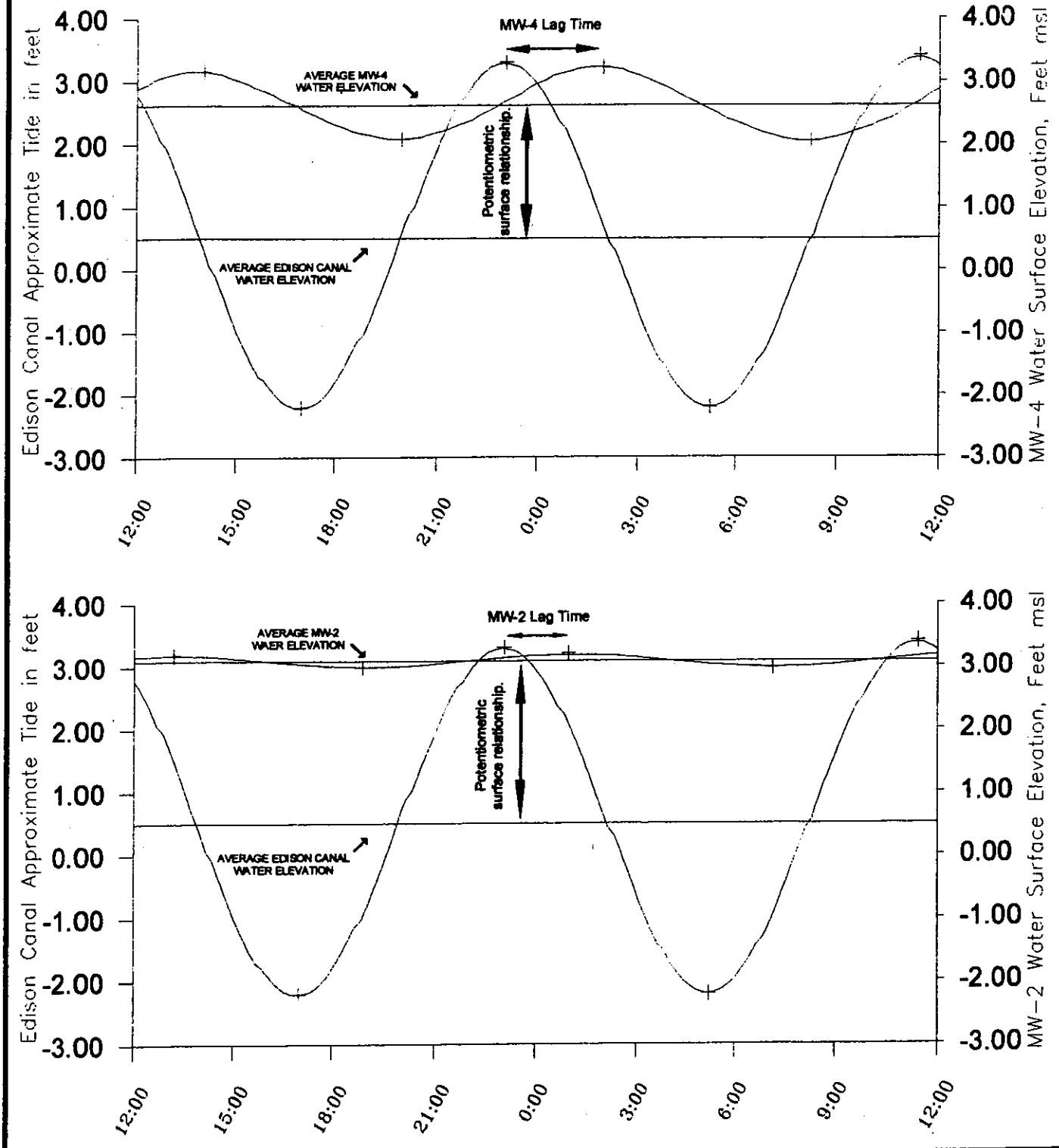
CONTOUR INTERVAL 1.0 FEET.

All site features diagramatic. Well coordinates from survey by Penfield & Smith - Engineers • Surveyors, Santa Barbara, California, May, 2001.
See Figure 1 for control information.

H2OGEOL
A GROUND WATER CONSULTANCY

POTENTIOMETRIC SURFACE MAP - 09/18/01
CENTRAL PORTION OF
NORTH SHORE AT MANDALAY BAY
VENTURA COUNTY, CALIFORNIA

FIGURE
3



H2OGEOL
A GROUND WATER CONSULTANCY

TIDAL RESPONSE FACTORS
SEPTEMBER 18-19, 2001
NORTH SHORE AT MANDALAY BAY
VENTURA COUNTY, CALIFORNIA

FIGURE
5

William A. Burns & Associates

April 10, 1999

North Shore At Mandalay Bay, LLC
110 Newport Center Drive
Suite 200
Newport Beach, California 92660

Attention: Roger Hartman

Subject: Bioremediation Field Test Results

Dear Roger:

The following is a summary of the bioremediation field test conducted at North Shore from March 1, 199 through March 14, 1999. The test involved the excavation of approximately 10 cubic yards of soil from an area at the site that is known to be most severely contaminated. The excavation consisted of first removing overburden soil to a depth of approximately three feet in order to expose a highly contaminated area. The contaminated soil was then excavated and spread to a depth of approximately one foot over an area approximately ten feet wide by 25 feet long in order to construct a test plot. The exposed trench from which the contaminated soil was excavated was then backfilled with surface soils from other areas of the site.

The construction of the test plot was completed on March 1, 1999. The contaminated soil was thoroughly mixed by aggressive tilling with a garden type Kubota tractor equipped with a rear mounted rototiller. Gypsum (calcium sulfate) was added to the test plot at a concentration of approximately 0.2 pounds of gypsum per cubic foot of soil. The purpose of the addition of gypsum was to reduce the pH of the soil to more favorable conditions. The soil was then again thoroughly mixed with the tractor mounted rototiller. The test plot was then divided into two sections. One section was used as a control and the other section was used to evaluate the addition of a surfactant. After the test plot was divided, one composite soil sample was collected. The composite sample consisted of 20 subsamples collected from both the control and the surfactant test areas (ten samples from each side). The collected subsamples were thoroughly mixed and the composite sample was collected. The composite sample was then divided into two samples for analyses; one for chemical analyses and one for microbiological analyses. Both samples were submitted to Capco Analytical Services (Capco) for analyses on March 1, 1999. Capco is certified by the State of California for the analyses of hazardous materials. Following the collection of the composite sample, water was then added to the control side through a pump and two-inch diameter supply hose. Water containing approximately 200 parts per million surfactant

20520 Big Rock Drive
Malibu, California 90265
(310) 456-0367

(Simple Green) was added to the surfactant test side. Both sides received sufficient water to raise the moisture content of the soil to approximately 20% - 30%.

On March 3, 1999 and March 4, 1999, both sides of the test plot were tilled and water was added to maintain appropriate soil moisture conditions. Note, surfactant was not added to the surfactant test side. On March 7, 1999 the test plots were again tilled and composite samples were collected from both the control test plot and the surfactant test plot. The composite samples consisted of ten subsamples. The subsamples were thoroughly mixed before the composite samples were collected. The composite sample from each of the test plots was then split in half and submitted to Capco for chemical and microbiological analyses. Following sample collection, water was added to the control test plot and water containing approximately 200 parts per million Simple Green was added to the surfactant test plot.

The tilling and water addition were repeated on both the control test plot and the surfactant test plot on March 10, 1999. No surfactant was added to the surfactant test plot. Composite samples were collected from both test plots in the same manner described above and submitted to Capco for analyses on March 14, 1999.

The analytical results of the bioremediation field test are summarized in Table 1. Laboratory data sheets are attached in Appendix A.

DISCUSSION

The field test results show very favorable conditions for the application of ordinary bioremediation techniques for the treatment of petroleum hydrocarbon contaminated soil at the North Shore At Mandalay Bay site. The initial concentrations for C4-C12 compounds were already more than three times below the cleanup level required in the approved Remedial Action Plan for the site. Likewise, C23+ plus compounds were nearly two times below the required cleanup standard for the site before the field test was started. The main concern for treatment is the mid-range hydrocarbon contaminants (C12-C22 compounds). At the start of the field test these compounds were nearly 12 times higher than the required cleanup standard. As Table 1 and Figure 1 show, these compounds, after one week of treatment, had reduced to 3, 040 mg/Kg for the control test plot and 1,030 mg/Kg for the surfactant treated test plot. These concentrations are more than 1.6 and 4.8 times below the required cleanup standard, respectively. By 3-14-99, the C13-C22 compounds in the control test plot had degraded to 2,400 mg/Kg, which is more than two times below the cleanup requirement. As the data show, the C13-C22 compounds increased in concentration to 3,500 mg/Kg from 3-7-99 to 3-14-99. However, 3,500 mg/Kg is still more than 1.4 times below the cleanup requirement. Please note that it is not unusual for hydrocarbon compounds to increase in concentration after an initial decrease. These variations are attributed to secondary metabolites produced by the microorganisms during the degradation process and to hetrogenicity of the sample population.

If you have any questions or need additional information concerning this report, please contact this office at (310) 456-0367.

Sincerely,

Richard Kelly

William Burns & Associates
20520 Big Rock Drive
Malibu, California 90265
(310) 456-0367

TABLE 1

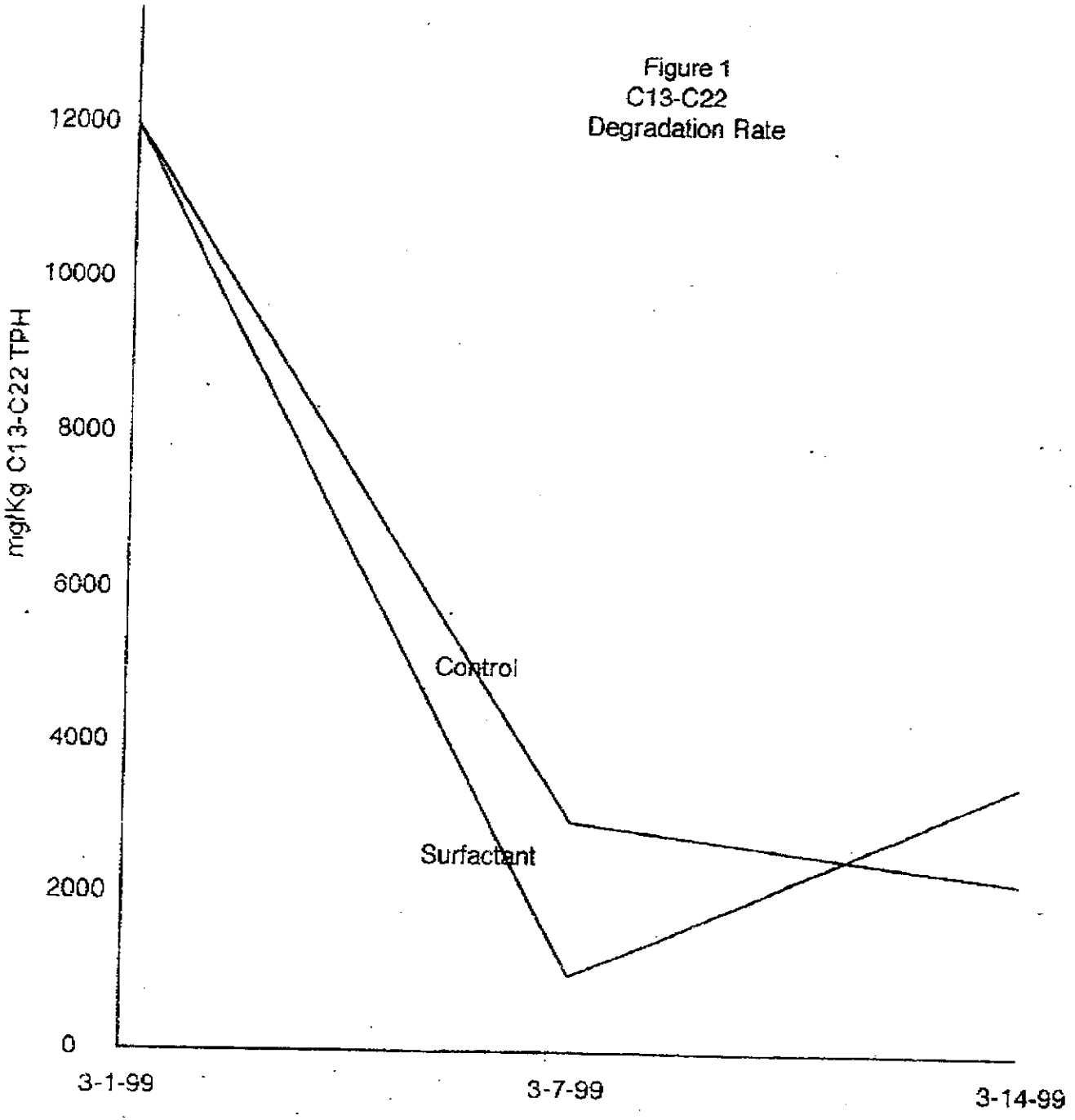
BIOREMEDIATION FIELD TEST RESULTS

	3-1-99	3-7-99		3-14-99	
ANALYTE	Control & Surfactant	Control	Surfactant	Control	Surfactant
C4-C12*	32	4.2	3.3	4.6	3.4
C13-C22*	11,800	3040	1030	2400	3500
C23+*	5,120	600	310	570	600
pH	7.6	7.7	7.5	7.7	7.4
Fungal Count	300 CFU/ml	2.3×10^4 CFU/ml	1.6×10^4 CFU/ml	3.8×10^4 CFU/ml	5.7×10^4 CFU/ml
HPC	1.2×10^6 CFU/ml	6.9×10^6 CFU/ml	10^5 CFU/ml	2.1×10^4 CFU/ml	3.2×10^4 CFU/ml
PA	<20 CFU/ml	4.4×10^3 CFU/ml	4.1×10^3 CFU/ml	3.0×10^2 CFU/ml	3.0×10^3 CFU/ml

* - mg/Kg
HPC -Heterotrophic Plate Count
CFU Colony Forming Units
PA Pseudomonas aeruginosa

William Burns & Associates
20520 Big Rock Drive
Malibu, California 90265
(310) 456-0367

Figure 1
C13-C22
Degradation Rate



Capco Analytical Services Incorporated (CAS)
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Prepared For: William Burns & Assoc.
20520 Big Rock Drive
Malibu, CA 90265

March 16, 1999

ATTENTION: Richard Kelly

Laboratory No: 990331
Date Received: 01-MAR-99
Project: North Shore

Job No: B00000
Sampled By: Client
ID: See Below

RESULTS

On March 1, 1999, two (2) samples were received for analysis by Capco Analytical Services Inc. The samples were identified and assigned the lab numbers listed below. This report consists of 3 pages excluding the cover letter, Chain of Custody and the subcontractor's report.

SAMPLE DESCRIPTION	CAS LAB NUMBER
#1	99033101
#2	99033102

Dan A. Farah, Ph.D.
Director - Analytical Operations

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: William Burns & Associates
Lab ID: 990331
Matrix: Soil

Analyst: PXY
Date Received: 03/01/99

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 8015m

Compound	Concentration mg/Kg	Dilution Factor	PQL mg/Kg	Surrogate % Rec.
CAS Lab #: 99033101				
Client ID: #1			**Date Extracted: 03/02/99**	
			Date Analyzed: 03/02/99	
TPH - (C4 - C12)	32	10.0	5	--
TPH - (C13 - C22)	11800	50.0	500	115
TPH - (C23+)	5120			
CAS Lab #: 990331-MB				
Client ID: Method Blank			**Date Extracted: 03/02/99**	
			Date Analyzed: 03/02/99	
TPH - (C4 - C12)	BQL	1.0	0.5	--
TPH - (C13 - C22)	BQL	1.0	10	97
TPH - (C23+)	BQL			

Surrogate: n-Undecane
Surrogate Control Limits: 75 - 120 %
PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit

Principal Analyst

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: William Burns & Assoc.
Lab ID: 990331
Analyst: ENN

Sample Matrix: Soil
Date Received: 03/01/99
Date Sampled: 03/01/99

pH RESULTS
EPA METHOD 9045

CAS Lab #	Sample ID	RESULTS pH (S.U.)	Date Analyzed
99033101	#1	7.6	03/01/99

PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit

Principal Analyst

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: Williams Burns & Associates
Sample ID: #2
Date Collected: 03/01/99
Time Collected: 1415
Date Analyzed: 03/10/99
CAS LAB NO: 990331
Analysis performed by: BioVir Laboratories, Inc.

SAMPLE ID.	FUNGAL COUNT (CFU/mL)	HETEROTROPHIC PLATE COUNT (CFU/mL)	PSEUDOMONAS AERUGINOSA (MPN/100mL)
99033102	300	1.2×10^5	<20

Dan Farah, Ph.D.
Director, Analytical Operations

CAPCO Analytical Services, Inc.

BioVir Laboratories, Inc.

685 Stone Road, Unit 6 · Benicia, CA 94510 · (707) 747-5906 · 1-800-GIARDIA · FAX (707) 747-1751 · WEB: www.biovir.com

REPORT OF SAMPLE EVALUATION

REPORT NO.: B990205A

PAGE NO.: 1 of 1

CLIENT ADDRESS: CapCo Analytical Services
1536 Eastman Avenue
Suite B
Ventura, CA 93003

CLIENT NO.: CAP003

ASSAY RESULTS:

1. Heterotrophic Plate Count:
   (SM 18th; 9215A)
2. *Pseudomonas aeruginosa* Assay:
   (SM18th; 9213F)
3. Fungal Analysis:
   (SM18th Ed.; 9610C)

SAMPLER: N/A SAMPLE DATE: 03/01/99 SAMPLE TIME: 02:15 SAMPLE SOURCE: Biosolid - Composite VOLUME: 491.8 g

BIOVIR ID#	SAMPLE DESCRIPTION	FUNGAL COUNT CFU / mL	HETEROTROPHIC PLATE COUNT CFU / mL	*PSEUDOMONAS AERUGINOSA* MPN / 100 mL
B990205A	99033102	300	1.2×10^6	< 20

SAMPLE EVALUATION PERFORMANCE CRITERIA: The precise rates of recovery of organisms from environmental samples cannot be determined. BioVir Laboratories has analyzed your sample(s) in accordance with the method described with each analyte above, however, due to inherent limitations of these methods organisms may avoid detection. For additional information regarding the limitations of the method(s) referred to above please call us at 1-800-GIARDIA.

COMPANY IS NOT AN INSURER: BioVir Laboratories is not an insurer or guarantor of the quality and/or purity of water, wastewater, biosolid or other material from which the sample was taken. BioVir offers no express or implied warranties whatsoever concerning the quality or purity of any water, wastewater, biosolid or other material which is ultimately consumed, distributed, applied or otherwise disposed.

3-10-99
ANALYSIS DATE

John L. Riggs
SIGNATURE/DATE
3-11-99

F:\WP\REPORTS\B990205A.wpd

CAPCO ANALYTICAL SERVICES
1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095 Fax 644-9947

CHAIN OF CUSTODY RECORD

REPORT
Fax 919-444-7015
Company William Burns & Associates
Address 20520 Big Rock Drive
Malibu, CA 90265
Phone 310-4560367 Contact Richard Reilly

BILL TO:
Company SAME
Address
Phone Contact
P.O.#

PROJ. NO
PROJECT NAME North Shore
SAMPLERS: (Signature) Richard Reilly

CONTAINER TYPES
A = AMBER B = BRASS G = GLASS
P = PLASTIC V = VOA VIAL O = OTHER

ANALYSIS: 8015 - Full Carbon Range; pH; Soil Bacteria

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: SOIL	MATRIX: SLUDGE	MATRIX: OTHER	CONTAINER #	CONTAINER TYPE	8015 - Full Carbon	Range	pH	Soil Bacteria				REMARKS
1	3/15/99	2:15	X																990331
2	3/15	2:15	X				X			4	G	X		X					
							X			1	6				X				Soil Bacteria:
										1)	Heterotrophic Plate Count								
										2)	Pseudomonas Plate Count Based on								
											Modified SM 9213 E.								
										3.)	Fungi								
																			R42

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The undersigned hereby acknowledges having received a copy of the Fee Schedule/General Information and Conditions, the provisions of which are a part of this agreement.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Richard P. Kelly	3-1-99 4:54	[signature]			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		Date/Time	

TURN AROUND TIME

24 Hr.	5 Day
48 Hr.	Standard
72 Hr.	Other

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Capco Analytical Services Incorporated (CAS)
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Prepared For: William Burns & Assoc.
20520 Big Rock Drive
Malibu, CA 90265

March 23, 1999

ATTENTION: Richard Kelly

Laboratory No: 990375
Date Received: 05-MAR-99
Project: North Shore

Job No: B00000
Sampled By: Client
ID: See Below

RESULTS

On March 5, 1999, four (4) samples were received for analysis by Capco Analytical Services Inc. The samples were identified and assigned the lab numbers listed below. This report consists of 3 pages excluding the cover letter, Chain of Custody and the subcontractor's report.

SAMPLE DESCRIPTION	CAS LAB NUMBER
#1 SG	99037501
#2 SG	99037502
#3 C	99037503
#4 C	99037504

Dan A. Farah, Ph.D.
Director - Analytical Operations

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: William Burns & Assoc.
Lab ID: 990375
Matrix: Soil

Analyst: PXY
Date Received: 03/07/99

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 8015m

Compound	Concentration mg/Kg	Dilution Factor	PQL mg/Kg	Surrogate % Rec.
CAS Lab #: 99037501				
Client ID: SG		**Date Extracted: 03/08/99**		
		Date Analyzed: 03/08/99		
TPH - (C4 - C12)	3.3	1.0	0.5	--
TPH - (C13 - C22)	1830	50.0	500	76
TPH - (C23+)	310			
CAS Lab #: 99037503				
Client ID: C		**Date Extracted: 03/08/99**		
		Date Analyzed: 03/08/99		
TPH - (C4 - C12)	4.2	1.0	0.5	--
TPH - (C13 - C22)	3040	50.0	500	84
TPH - (C23+)	600			
CAS Lab #: 990375-MB				
Client ID: Method Blank		**Date Extracted: 03/08/99**		
		Date Analyzed: 03/08/99		
TPH - (C4 - C12)	BQL	1.0	0.5	--
TPH - (C13 - C22)	BQL	1.0	10	103
TPH - (C23+)	BQL			

Surrogate: n-Undecane
Surrogate Control Limits: 57 - 114 %
PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit

Principal Analyst

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: William Burns & Assoc.
Lab ID: 990375
Analyst: NN

Sample Matrix: Soil
Date Received: 03/07/99
Date Sampled: 03/07/99

pH RESULTS
EPA METHOD 9045

CAS Lab #	Sample ID	RESULTS pH (S.U.)	Date Analyzed
99037501	SG	7.5	03/08/99
99037503	C	7.7	03/08/99

PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit

Principal Analyst

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: Williams Burns & Associates
Date Collected: 03/07/99
Time Collected: 1115
Date Analyzed: 03/19/99
CAS LAB NO: 99037502
Analysis performed by: Biovir Laboratories, Inc.

SAMPLE ID	FUNGAL COUNT (CFU/mL)	HETEROTROPHIC PLATE COUNT (CFU/mL)	PSEUDOMONAS AERUGINOSA (MPN/100mL)
99037502	1.6×10^4	1.0×10^5	4.1×10^3
99037504	2.3×10^4	6.9×10^6	4.4×10^3

Dan Farah, Ph.D.
Director, Analytical Operations

CAPCO Analytical Services, Inc.

BioVir Laboratories, Inc.

683 Stone Road, Unit 6 · Benicia, CA 94510 · (707) 747-5906 · 1-800-GIARDIA · FAX (707) 747-1751 · WEB: www.biovir.com

REPORT OF SAMPLE EVALUATION

REPORT NO.: B990228A through B990228B

PAGE NO.: 1 of 1

CLIENT ADDRESS: CapCo Analytical Services
1536 Eastman Avenue
Suite B
Ventura, CA 93003

CLIENT NO.: CAP003

ASSAY RESULTS:

1. Heterotrophic Plate Count:
   (SM 18th: 9215A)
2. *Pseudomonas aeruginosa* Assay:
   (SM18th; 9213F)
3. Fungal Analysis:
   (SM18th Ed:; 9610C)

SAMPLER: N/A SAMPLE DATE: 03/07/99 SAMPLE SOURCE: Biosolid - Composite

BIOVIR ID#	SAMPLE DESCRIPTION	SAMPLE TIME	SAMPLE VOLUME	FUNGAL COUNT CFU / mL	HETEROTROPHIC PLATE COUNT CFU / mL	*PSEUDOMONAS AERUGINOSA* MPN / 100 mL
B990228A	#2; 990375 02	11:15	420.5 g	1.6×10^3	1.0×10^7	4.1×10^5
B990228B	#4; 990375 04	11:30	466.4 g	2.3×10^4	6.9×10^6	4.4×10^5

SAMPLE EVALUATION PERFORMANCE CRITERIA: The precise rates of recovery of organisms from environmental samples cannot be determined. BioVir Laboratories has analyzed your sample(s) in accordance with the method described with each analyte above. However, due to inherent limitations of these methods organisms may avoid detection. For additional information regarding the limitations of the method(s) referred to above please call us at 1-800-GIARDIA.

COMPANY IS NOT AN INSURER: BioVir Laboratories is not an insurer or guarantor of the quality and/or purity of water, wastewater, biosolid or other material from which the sample was taken. BioVir offers no express or implied warranties whatsoever concerning the quality or purity of any water, wastewater, biosolid or other material which is ultimately consumed, distributed, applied or otherwise disposed.

3/19/99
ANALYSIS DATE

John L. Riggs
LABORATORY DIRECTOR

3/22/99

CAPCO ANALYTICAL SERVICES

1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095 Fax 644-9947

CHAIN OF CUSTODY RECORD

REPORT
Fax 949-644-7015
Company William Burns & Associates
Address 20520 Big Rock Drive
Malibu, CA 90265
Phone 310.456.0362 Contact Richard Kelly

BILL TO: P.O.#
Company SAME
Address
Phone Contact:

PROJ. NO | PROJECT NAME: North Shore

SAMPLERS: (Signature) Richard Kelly

CONTAINER TYPES
A = AMBER B = BRASS G = GLASS
P = PLASTIC V = VOA VIAL O = OTHER

SAMPLE NO	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	CONTAINER # / TYPE	ANALYSIS: 8015; FOR CARBON	PH	Soil BACTERIA	REMARKS
1	3-7	11:15	X		SG		X			6 / 1	X	X		
2	3-7	11:15	X		SG		X			6 / 1			X	PH52
3	3-7	11:30	X		C		X			6 / 1	X	X		
4	3-7	11:30	X		C		X			6 / 1			X	

990375

Soil BACTERIA:
1) HETEROTROPHIC PLATE COUNT
2) PSEUDOMONAS PLATE COUNT BASED ON MODIFIED SM 9213 E
3) FUNGI

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The undersigned hereby acknowledges having received a copy of the Fee Schedule/General Information and Conditions, the provisions of which are a part of this agreement.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Richard Kelly	3.7.99 1:20				
Relinquished by: (Signature)	Date/Time	Received by: (Signature)		Date/Time	

TURN AROUND TIME

24 Hr.		5 Day	
48 Hr.		Standard	
72 Hr.		Other	

WHITE COPY CANARY COPY PINK COPY

Capco Analytical Services Incorporated (CAS)
1536 Eastman Avenue, Suite B
Ventura, CA. 93003
(805) 644-1095

Prepared For: William Burns & Assoc.
20520 Big Rock Drive
Malibu, CA 90265

March 23, 1999

ATTENTION: Richard Kelly

Laboratory No: 990427
Date Received: 15-MAR-99
Project: North Shore

Job No: B00000
Sampled By: Client
ID: See Below

RESULTS

On March 15, 1999, four (4) samples were received for analysis by Capco Analytical Services Inc. The samples were identified and assigned the lab numbers listed below. This report consists of 3 pages excluding the cover letter, Chain of Custody and the subcontractor's report.

SAMPLE DESCRIPTION	CAS LAB NUMBER
#1 SG	99042701
#2 SG	99042702
#3 C	99042703
#4 C	99042704

Dan A. Farah, Ph.D.
Director - Analytical Operations

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: William Burns & Associates
Lab ID: 990427
Matrix: Soil

Analyst: PXY
Date Received: 03/14/99

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 8015m

Compound	Concentration mg/Kg	Dilution Factor	PQL mg/Kg	Surrogate % Rec.
CAS Lab #: 99042701				
Client ID: #1 SG			**Date Extracted: 03/17/99**	
			Date Analyzed: 03/18/99	
TPH - (C4 - C12)	3.4	1.0	0.5	--
TPH - (C13 - C22)	3500	50.0	500	108
TPH - (C23+)	600			
CAS Lab #: 99042703				
Client ID: #3 C			**Date Extracted: 03/17/99**	
			Date Analyzed: 03/18/99	
TPH - (C4 - C12)	4.6	1.0	0.5	--
TPH - (C13 - C22)	2400	50.0	500	94
TPH - (C23+)	570			
CAS Lab #: 990427-MB				
Client ID: Method Blank			**Date Extracted: 03/17/99**	
			Date Analyzed: 03/18/99	
TPH - (C4 - C12)	BQL	1.0	0.5	--
TPH - (C13 - C22)	BQL	1.0	10	98
TPH - (C23+)	BQL			

Surrogate: n-Undecane
Surrogate Control Limits: 57 - 114 %
PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit

Peter Yu
Principal Analyst

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: William Burns & Assoc.
Lab ID: 990427
Analyst: NN

Sample Matrix: Soil
Date Received: 03/14/99
Date Sampled: 03/14/99

pH RESULTS
EPA METHOD 9045

CAS Lab #	Sample ID	RESULTS pH (S.U.)	Date Analyzed
99042701	#1 SG	7.4	03/15/99
99042703	#3 C	7.7	03/15/99

PQL: Practical Quantitation Limit
BQL: Below Practical Quantitation Limit

Principal Analyst

CAPCO Analytical Services, Inc.

Capco Analytical Services INC. (CAS)
1536 Eastman Avenue, Suite B
Ventura CA 93003
(805) 644-1095

Client: Williams Burns & Associates
Date Collected: 03/14/99
Time Collected: N/A
Date Analyzed: 03/22/99
CAS LAB NO: 990427
Analysis performed by: BioVir Laboratories, Inc.

SAMPLE ID	FUNGAL COUNT (CFU/mL)	HETEROTROPHIC PLATE COUNT (CFU/mL)	PSEUDOMONAS AERUGINOSA (MPN/100mL)
99042702 SG	5.7×10^6	2.1×10^4	3.0×10^3
99042704 C	3.8×10^6	3.2×10^4	3.0×10^3

Dan Farah, Ph.D.
Director, Analytical Operations

CAPCO Analytical Services, Inc.

BioVir Laboratories, Inc.

685 Stone Road, Unit 6 · Benicia, CA 94510 · (707) 747-6900 · 1-800-GIARDIA · FAX (707) 747-1751 · WEB: www.biovir.com

REPORT OF SAMPLE EVALUATION

REPORT NO.: B990251A through B990251B

PAGE NO.: 1 of 1

CLIENT ADDRESS: CapCo Analytical Services
1536 Eastman Avenue
Suite B
Ventura, CA 93003

CLIENT NO.: CAP003

ASSAY RESULTS:

1. Heterotrophic Plate Count:
   (SM 18th; 9215A)
2. *Pseudomonas aeruginosa* Assay:
   (SM18th; 9213F)
3. Fungal Analysis:
   (SM18th Ed.; 9610C)

SAMPLER: N/A SAMPLE DATE: 03/14/99 SAMPLE SOURCE: Biosolid - Composite

BIOVIR ID#	SAMPLE DESCRIPTION	SAMPLE VOLUME	FUNGAL COUNT CFU / mL	HETEROTROPHIC PLATE COUNT CFU / mL	*PSEUDOMONAS AERUGINOSA* MPN / 100 mL
B990251A	#2; 990427 02	25 Grams	5.7×10^{4}	2.1×10^{8}	3.0×10^{1}
B990251B	#4; 990427 04	25 Grams	3.8×10^{5}	3.2×10^{7}	3.0×10^{1}

SAMPLE EVALUATION PERFORMANCE CRITERIA: The precise rates of recovery of organisms from environmental samples cannot be determined. BioVir Laboratories has analyzed your sample(s) in accordance with the method described with each analyte above, however, due to inherent limitations of these methods organisms may avoid detection. For additional information regarding the limitations of the method(s) referred to above please call us at 1-800-GIARDIA.

COMPANY IS NOT AN INSURER: BioVir Laboratories is not an insurer or guarantor of the quality and/or purity of water, wastewater, biosolid or other material from which the sample was taken. BioVir offers no express or implied warranties whatsoever concerning the quality or purity of any water, wastewater, biosolid or other material which is ultimately consumed, distributed, applied or otherwise disposed.

3/22/99
ANALYSIS DATE

John L. Riggs
SIGNATURE/DATE
3/23/99

CAPCO ANALYTICAL SERVICES
1536 Eastman Avenue
Ventura, CA 93003
(805) 644-1095 Fax 644-9947

CHAIN OF CUSTODY RECORD

REPORT
Fax 949-644-7015
Company William Burns & Associates
Address 20520 Big Rock Dr.
Malibu, CA 90265
Phone 310-456-0317 Contact Richard Kelly

BILL TO:
P.O.#
Company SAME
Address
Phone Contact

PROJ. NO
PROJECT NAME North Shore

SAMPLERS: (Signature) Richard Kelly

CONTAINER TYPES
A = AMBER B = BRASS G = GLASS
P = PLASTIC V = VOA VIAL O = OTHER

ANALYSIS: BOISM - Full Carbon; pH; Soil Bacteria

REMARKS: 990427- R4R2

SAMPLE NO.	DATE SAMPLED	TIME SAMPLED	COMP	GRAB	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	CONTAINER #	CONTAINER TYPE	BOISM - Full Carbon	pH	Soil Bacteria
1	3-14				SG					1	G	X	X	
2	3-14				SG					1	G			X
3	3-14				C					1	G	X	X	
4	3-14				C					1	G			X

Soil Bacteria:
1.) Heterotropic Plate Count
2.) Pseudomonas Plate Count Based on Modified SM 9213E
3.) Fungi

CHECK ONE BOX:
DISPOSE SAMPLES
RETURN SAMPLES

The undersigned hereby acknowledges having received a copy of the Fee Schedule/General Information and Conditions, the provisions of which are a part of this agreement.

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Richard Kelly	3-14-99 10:55	D. [illegible]			
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time		

TURN AROUND TIME

24 Hr.		5 Day	
48 Hr.		Standard	
72 Hr.		Other	

WHITE COPY____ CANARY COPY____ PINK COPY____